

McGRAW-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS

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EXHIBIT B
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On the cover: Representation of a fullerene molecule with a noble gas atom trapped inside. At the Permian-Triassic sedimentary boundary the noble gases helium and argon have been found trapped inside fullerenes. They exhibit isotope ratios quite similar to those found in meteorites, suggesting that a fireball meteorite or asteroid exploded when it hit the Earth, causing major changes in the environment. (Image copyright © Dr. Luann Becker. Reproduced with permission.)

Over the six editions of the Dictionary, material has been drawn from the following references: G. M. Garrity et al., *Taxonomic Outline of the Prokaryotes*, Release 2, Springer-Verlag, January 2002; D. W. Linzey, *Vertebrate Biology*, McGraw-Hill, 2001; J. A. Pechenik, *Biology of the Invertebrates*, 4th ed., McGraw-Hill, 2000; U.S. Air Force Glossary of Standardized Terms, AF Manual 11-1, vol. 1, 1972; F. Casey, ed., *Compilation of Terms in Information Sciences Technology*, Federal Council for Science and Technology, 1970; *Communication-Electronics Terminology*, AF Manual 11-1, vol. 3, 1970; P. W. Thrush, comp. and ed., *A Dictionary of Mining, Mineral, and Related Terms*, Bureau of Mines, 1968; *A DOD Glossary of Mapping, Charting and Geodesic Terms*, Department of Defense, 1967; J. M. Gilliland, *Solar-Terrestrial Physics: A Glossary of Terms and Abbreviations*, Royal Aircraft Establishment Technical Report 67158, 1967; W. H. Allen, ed., *Dictionary of Technical Terms for Aerospace Use*, National Aeronautics and Space Administration, 1965; *Glossary of Staff Terminology*, Office of Aerospace Research, U.S. Air Force, 1963; *Naval Dictionary of Electronic, Technical, and Imperative Terms*, Bureau of Naval Personnel, 1962; R. E. Huschke, *Glossary of Meteorology*, American Meteorological Society, 1959; *ADP Glossary*, Department of the Navy, NAVSO P-3097; *Glossary of Air Traffic Control Terms*, Federal Aviation Agency; *A Glossary of Range Terminology*, White Sands Missile Range, New Mexico, National Bureau of Standards, AD 467-424; *Nuclear Terms: A Glossary*, 2d ed., Atomic Energy Commission.

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element's equivalent weight. Abbreviated meq. { 'mil ē-
'vāv-ə-lout }

mill See tonne. { 'mil'yā }

millifarad [ELEC] A unit of capacitance equal to one-thou-
sandth of a farad. Abbreviated mF. { 'mil-ē'f-ar-əd }

milligal [MECH] A unit of acceleration commonly used in
geologic measurements, equal to 10^{-3} galileo, or 10^{-5} meter
per second per second. Abbreviated mGal. { 'mil-ə-gal }

milligauss [ELECTROMAG] A unit of magnetic flux density
equal to one-thousandth of a gauss. Abbreviated mG.
{ 'mil-ə-gaus }

milligram [MECH] A unit of mass equal to one-thousandth
of a gram. Abbreviated mg. { 'mil-ə-gram }

milligram-hour [NUCLEO] A unit of radiation dose, equal to
the radiation emitted by a source with an equivalent radium
content of 1 milligram for a period of 1 hour. Abbreviated
mgh. { 'mil-ə-gram-aur }

millihenry [ELECTROMAG] A unit of inductance equal to
one-thousandth of a henry. Abbreviated mH. { 'mil-ə-hen-
-rē }

millihertz [PHYS] A unit of frequency equal to one-thou-
sandth of a hertz. Abbreviated mHz. Also known as millicy-
cle (mic). { 'mil-ə-herts }

milling See millimeter of mercury.

milli-inch See mil. { 'mil-ē-īnch }

milli-k [NUCLEO] A unit of reactivity; the reactivity of a reac-
tor in milli-k is equal to $1000(k - 1)$, where k is the effective
multiplication factor. { 'mil-ē-kā }

millikan meter [ELECTR] An integrating ionization chamber
in which a gold-leaf electroscope is charged a known amount
and ionizing events reduce this charge, so that the resulting
angle through which the gold leaf is repelled at any given time
indicates the number of ionizing events that have occurred.
{ 'mil-ə-kon-mēd-ər }

millikan oil-drop experiment [ATOM PHYS] A method of
determining the charge on an electron, in which one measures
the terminal velocities of rise and fall of oil droplets in an
electric field after the droplets have picked up charge from
ionization in the surrounding gas produced by an x-ray beam.
{ 'mil-ə-kon-'oil-drāp-ik-sper-ə-mənt }

milliliter [MECH] A unit of volume equal to 10^{-3} liter or 10^{-6}
cubic meter. Abbreviated ml. Also known as mil. { 'mil-
-lī-tər }

milli-mass-unit [PHYS] One-thousandth of an atomic mass
unit. Abbreviated mmu. { 'mil-ē-'mas-yū-nət }

millimeter [MECH] A unit of length equal to one-thousandth
of a meter. Abbreviated mm. Also known as metric line;
varich. { 'mil-ē-mēd-ər }

millimeter of mercury [MECH] A unit of pressure, equal to
the pressure exerted by a column of mercury 1 millimeter high
with a density of 13.5951 grams per cubic centimeter under
the standard acceleration of gravity, equal to 133.322387415
pascals; it differs from the torr by less than 1 part in 7,000,000.
Abbreviated mmHg. Also known as millihg. { 'mil-ē-mēd-
-ər-əv-'mōr-kyə-rē }

millimeter of water [MECH] A unit of pressure, equal to the
pressure exerted by a column of water 1 millimeter high with
a density of 1 gram per cubic centimeter under the standard
acceleration of gravity, equal to 9.80665 pascals. Abbreviated
mmH₂O. { 'mil-ē-mēd-ər-əv-'wōdər }

millimeter wave [ELECTROMAG] An electromagnetic wave
having a wavelength between 1 millimeter and 1 centimeter,
corresponding to frequencies between 30 and 300 gigahertz.
Also known as millimetric wave. { 'mil-ē-mēd-ər-'wāv }

millimetric wave See millimeter wave. { 'mil-ē-mē-'trik-'wāv }

milli-micro See nano-. { 'mil-ē-mī-kro-ō }

millimicron See nanometer. { 'mil-ē-mī-kron }

milling [MECH ENG] Mechanical treatment of materials to
produce a powder, to change the size or shape of metal powder
particles, or to coat one powder mixture with another. [MIN
ENG] A combination of open-cut and underground mining,
in which the ore is mined in open cut and handled underground.
{ 'mil-ig }

milling cutter [DES ENG] A rotary tool-steel cutting tool with
peripheral teeth, used in a milling machine to remove material
from the workpiece through the relative motion of workpiece
and cutter. { 'mil-ig-'kəd-ər }

milling machine [MECH ENG] A machine for the removal of
metal by feeding a workpiece through the periphery of a rotating
circular cutter. Also known as miller. { 'mil-ig-mə-shēn }

milling ore See second-class ore. { 'mil-ig-ōr }

milling planer [MECH ENG] A planer that uses a rotary cutter
rather than single-point tools. { 'mil-ig-'plān-ər }

milling system See chute system. { 'mil-ig-'sis-təm }

Millington reverberation formula [ACOUST] A formula that
states that the reverberation time of a chamber in seconds is
0.05 times its volume in cubic feet, divided by the sum over
the surfaces of the chamber of the product of the surface's area
in square feet by the natural logarithm of 1 minus its absorption
coefficient. { 'mil-ig-tən-rī-vər-bə-'rā-shən-for-myə-lə }

milling width [MIN ENG] Width of lode designated for treat-
ment in the mill, as calculated with regard to daily tonnage.
{ 'mil-ig-'width }

million [MATH] The number 10^6 , or 1,000,000. { 'mil-
-yən }

million electronvolts See megaelectronvolt. { 'mil-yən
-i'lek-trən-vōlts }

million floating-point operations per second [COMPUT SCI]
A unit used to measure the processing speed or throughput
of supercomputers or array processors. Abbreviated Mflop.
{ 'mil-yən-'flōd-ig-'pōint-əp-ə-'rā-shənz-pər-'sek-ənd }

million instructions per second [COMPUT SCI] A unit used
to measure the speed at which a computer's central processing
unit can process instructions. Abbreviated MIPS. { 'mil-
-yən-in-'strək-shənz-pər-'sek-ənd }

millipede [INV ZOO] The common name for members of the
arthropod class Diplopoda. { 'mil-ə-pēd }

millipore filter [MICROBIO] A filter capable of ultrafine sep-
aration, used for purification and analyses of fluids, among
other applications. { 'mil-ə-pōr-fil-tər }

millirad [NUCLEO] A unit of absorbed ionizing radiation
dose equal to one-thousandth of a rad. Abbreviated mrad.
{ 'mil-ə-rad }

milliroentgen [NUCLEO] A unit of radioactive dose of elec-
tromagnetic radiation equal to one-thousandth of a roentgen.
Abbreviated mr. { 'mī-rē-'rent-gən }

millisecond [MECH] A unit of time equal to one-thousandth
of a second. Abbreviated ms; msec. { 'mil-ə-'sek-ənd }

millisecond delay cap [ENG] A delay cap with an extremely
short (20–500 thousandths of a second) interval between pass-
ing of current and explosion. Also known as short-delay deto-
nator. { 'mil-ə-'sek-ənd-dī-lā-'kap }

millisecond pulsar See fast pulsar. { 'mil-ə-'sek-ənd-'pəl-
-sār }

millisite [MINERAL] $(\text{Na,K})\text{CaAl}_6(\text{PO}_4)_4(\text{OH})_9 \cdot 3\text{H}_2\text{O}$ White
mineral composed of a basic hydrous phosphate of sodium,
potassium, calcium, and aluminum. { 'mil-ə-sīt }

millivolt [ELEC] A unit of potential difference or emf equal
to one-thousandth of a volt. Abbreviated mV. { 'mil-ə-'vōlt }

millivoltmeter [ELEC] A voltmeter whose scale is calibrated
to indicate voltage values in millivolts. { 'mil-ə-'vōlt-mēd-ər }

milliwatt [MECH] A unit of power equal to one-thousandth
of a watt. Abbreviated mW. { 'mil-ə-'wāt }

mill length See random length. { 'mil-'lɛŋkθ }

Millon's reagent [CHEM] Reagent used to test for proteins;
made by dissolving mercury in nitric acid, diluting, then
decanting the liquid from the precipitate. { 'mē-'lōnz-re-ā-jənt }

mill ore [MIN ENG] An ore that must be given some prelimi-
nary treatment before a marketable grade or a grade suitable
for further treatment can be obtained. { 'mil-ōr }

millrace [CIV ENG] A canal filled with water that flows to
and from a waterwheel acting as the power supply for a
mill. { 'mil-rās }

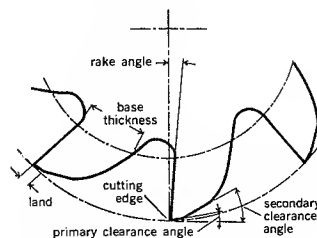
mill run [MIN ENG] 1. A given quantity of ore tested for
its quality by actual milling. 2. The yield of such a test.
{ 'mil-rən }

mill scale [MET] A surface layer of ferric oxide (Fe_3O_4) that
forms on steel or iron during hot rolling. { 'mil-skāl }

Mills cross [ELECTROMAG] An antenna array that consists
of two antennas oriented perpendicular to each other and that
produces a narrow pencil beam. { 'milz-'krɒs }

Mills-Crowe process [MIN ENG] Method of regeneration of

MILLING CUTTER



Typical milling cutter teeth